RESEARCH REGARDING THE INFLUENCE OF CROP TECHNOLOGY, WATER SUPPLY AND GENOTYPE ON SOYBEAN YIELD

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SUMMARY

In the context of farming intensifying, the increasing of economical efficiency is the main aim with impact on people’s living standard. This objective could be achieved only by rational utilization of all resources in farming, especially land and irrigation water.

In the context of Romania joining to EU, the soybean crop will be reinforced. By the performed researches, it will be followed the establishment of the most adequate cultivars for irrigated crop, optimum technology and limited water supplying level.

To solve the aims proposed by NIARD Fundulea, a tri-factorial experiment was performed, as follows:

A=Crop technology
   A1 – P60 bacterized
   A2 – N40P60 bacterized

B=Irrigation regime
   B1=dryland
   B2=irrigated 50% active moisture interval on 0-80 cm, with m=1; sprinkling
   B3=irrigated 50% active moisture interval on 0-80 cm, with m=1/2; sprinkling
   B4=irrigated 50% active moisture interval on 0-80 cm, with m=1/3; sprinkling
   B5=irrigated 50% active moisture interval on 0-80 cm, with m=1/2; sprinkling
   B6=irrigated 50% active moisture interval on 0-80 cm, with m=1/3; sprinkling

C= Genotype
   C1 – Romanesc 99
   C2 – Triumf
   C3 – Danubian

Based on the obtained results, it was ascertained that the most adequate soybean cultivars, under irrigation conditions are Triumf and Danubian. As regards the crop technology, the achieved yield was of 38.2 q/ha in variant a2 – N40P60 bacterized. Because of the excessively rainy year 2005, the results regarding the limited water supplying were not conclusive. The future researches will establish the level of watering norm diminution.

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